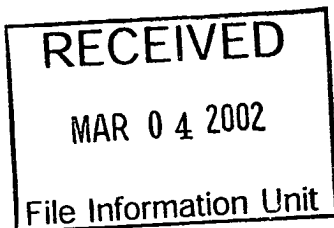


REQUEST FOR ACCESS TO AN APPLICATION UNDER 37 CFR 1.14(e)

In re Application of

Application Number

08/721447

Filed

9-27-96

Art Unit

1644

Examiner

Decoux

Paper No. 23

Assistant Commissioner for Patents
Washington, DC 20231

1. ☒ Thereby request access under 37 CFR 1.14(e)(2) to the application file record of the above-identified ABANDONED Application, which is not within the file jacket of a pending Continued Prosecution Application (CPA) (37 CFR 1.53(d)) and is: (CHECK ONE)

☒ (A) referred to in:

United States Patent Application Publication No. 6316403, page _____, line _____,

United States Patent Number _____, column _____, line _____, or

an International Application which was filed on or after November 29, 2000 and which

designates the United States, WIPO Pub. No. _____, page _____, line _____.

☐ (B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11(b) or

1.14(e)(2)(i), i.e., Application No. _____, paper No. _____, page _____, line _____.

2. ☐ I hereby request access under 37 CFR 1.14(e)(1) to an application in which the applicant has filed an authorization to lay open the complete application to the public.

Henry Duan
Signature

2-9-02

Date

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Unit: _____



US006316403B1

(12) **United States Patent**
Pinsky et al.

(10) **Patent No.:** US 6,316,403 B1
(45) **Date of Patent:** Nov. 13, 2001

(54) **METHODS FOR TREATING AN ISCHEMIC DISORDER AND IMPROVING STROKE OUTCOME**

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(73) **Assignee:** The Trustees of Columbia University in the City of New York, New York, NY (US)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** 09/269,426

(22) **PCT Filed:** Sep. 25, 1997

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§ 102(e) Date: Jun. 25, 1999

(87) **PCT Pub. No.:** WO98/13058

PCT Pub. Date: Apr. 2, 1998

Related U.S. Application Data

(63) Continuation-in-part of application No. 08/721,447, filed on Sep. 27, 1996, now abandoned.

(51) **Int. Cl.⁷** A61K 38/00

(52) **U.S. Cl.** 514/2; 514/21

(58) **Field of Search** 514/23, 20, 2, 514/21

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,711,848 12/1987 Insley et al. 435/91

FOREIGN PATENT DOCUMENTS

2141641 8/1995 (CA) .

OTHER PUBLICATIONS

Tijburg, et al. (1990) Activation of the Coagulation Mechanism on Tumor Necrosis Factor-stimulated Cultured Endothelial Cells and Their Extracellular Matrix, *J. Biol. Chem.* 266:12067-12074.

Benedict, C.R., et al., 1994, Endothelial-Dependent Procoagulant and Anticoagulant Mechanisms, *Texas Heart Institute Journal* 21:86-90.

Benedict et al. (1991) Active site-blocked factor IXa prevents intravascular thrombus formation in the coronary vasculature without inhibiting extravascular coagulation in a canine thrombosis model, *J. Clin. Invest.* 88, 1760-1765.

Brandstetter et al. (PNAS 92:9796-800, 1995).

Bronner et al. (1995) Primary prevention of stroke, *New Eng. J. Med.* 333, 1392-1400.

Brown and Piantadosi (1992) Recovery of energy metabolism in rat after carbon monoxide hypoxia, *J. Clin. Invest.* 89, 666-672.

Carlos and Harlan (1994) Leukocyte-endothelial adhesion molecules, *Blood* 24, 2068-2101.

Connolly et al. (1996) Cerebral protection in homozygous null ICAM-1 mice after middle cerebral artery occlusion, *J. Clin. Invest.* 97, 209-216.

Connolly et al. (1996) Procedural and strain-related variables significantly affect outcome in a murine model of focal cerebral ischemia, *Neurosurgery* 38, 523-532.

Dawson and Snyder (1994) Gases as biological messengers: nitric oxide and carbon monoxide in the brain, *J. Neurosci.* 14, 5147-5159.

Fassbender et al. (1995) Circulating selectin- and immunoglobulin-type adhesion molecules in acute ischemic stroke, *Stroke* 26, 1361-1364.

Holdright, D., et al., 1994, Comparison of the effect of heparin and aspirin versus aspirin alone on transient myocardial ischemia and in-hospital prognosis in patients with unstable angina *J. Am. Coll. Cardiol.* 24:39-45.

Ishimaru et al. (1991) Effects of successive carbon monoxide exposures on delayed neuronal death in mice under the maintenance of normal body temperature, *Biochem. Biophys. Res. Commun.* 179, 836-840.

Jerome et al. (1994) P-selectin and ICAM-1 dependent adherence reactions: role in the genesis of postischemic no-reflow, *Am. J. Physiol.* 266, H1316-H1321.

Kim et al. (1995) Adhesive glycoproteins CD11a and CD18 are upregulated in the leukocytes from patients with ischemic stroke and transient ischemic attacks, *J. Neurol. Sci.* 128, 45-50.

Kochanek and Hallenbeck (1992) Polymorphonuclear leukocytes and monocytes/macrophages in the pathogenesis of cerebral ischemia and stroke, *Stroke* 23, 1367-1379.

Mayevsky et al. (1995) Multiparametric monitoring of the awake brain exposed to carbon monoxide, *J. Appl. Physiol.* 78, 1188-1196.

Okada et al. (1994) P-selectin and intercellular adhesion molecule-1 expression after focal brain ischemia and reperfusion, *Stroke* 25, 202-211.

(List continued on next page.)

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(57) **ABSTRACT**

The present invention provides for a method of treating an ischemic disorder in a subject which comprises administering to the subject a pharmaceutically acceptable form of inactivated Factor IX in a sufficient amount over a sufficient period of time to inhibit coagulation so as to treat the ischemic disorder in the subject.

19 Claims, 60 Drawing Sheets